MATH 116 Elementary Statistics Fall 2008

Instructor: Dennis Harberson Office: AIRW 154 Phone: 342-1926

Email:harberson@ulm.edu Office Hours: TBA

CATALOG DESCRIPTION: Introduction to descriptive statistics, probability, binomial and normal distributions, hypothesis testing, correlation and regression. Not applicable to a major or minor in mathematics or computer science. Prerequisite: a grade of "C" or better in MATH 110, 111, 113 or 114.

Note: You must drop this class immediately if you don't meet the prerequisite.

COURSE GOALS: 1. To learn when to use different statistical methods.

2. To learn how to generate statistical results.

3. To learn how to interpret the results.

MATERIALS:

1. Textbook: <u>Beginning Statistics</u> by Warren, Denley and Atchleve.

2. Calculator: A scientific calculator with statistical capabilities.

The calculator demonstrated in class will be the

TI 30X II.

***Be sure to bring your book and a calculator to every class.

ATTENDANCE: The Math Department believes that attendance is a vital component for success in any math course. Thus, the department's policy regarding attendance is as follows: Any student that has excessive absences, more than 25% of the total number of class meetings, must withdraw (final drop date-Oct. 22) or receive an F for the course. The guidelines for excused absences may be found in the current ULM catalog. Roll will be taken at the beginning of class each day. Any student arriving after the roll has been checked or leaving before class is dismissed will be marked absent. If a student is tardy, it is the student's responsibility to talk with the instructor after class and discuss having his/her absence removed. Otherwise the absence remains and will be considered an unexcused absence.

Cell Phones/Beepers/ and other Portable Electronic Devices: Any personal electronic devices such as cell phones, laptop computers, beepers, mp3 players, video games, etc. must be turned off and cannot be out during class. The first instance of class disruption related to these types of devices will result in a penalty of 3% on the next exam, for the second instance a penalty of 5% on the next exam will result, and a 10% penalty on the next exam will result for each additional instance. This policy also applies to headphones, ear-buds, etc.

GRADES: Exam 1, 2, 3 20% each

Comprehensive Final Exam 30% Quiz/ homework 10%

Semester grades will be assigned as follows...

<u>Percentage</u>	Final Grade
90 - 100	A
80 - 89	В
70 - 79	C
60 - 69	D
< 60	F

Your mid-term grade gives an approximate indication of your performance on graded work up to that point. It does not necessarily represent fifty percent of your final grade. There is no guarantee that your final grade will be the same as your midterm grade. Undergraduate mid-term grades will be posted on-line for students to view via Arrow. Mid-term grades indicate a student's status at mid-semester only and do not indicate the final performance outcome of a student.

TENTATIVE* COURSE OUTLINE:

Class	Ch.	<u>Topics</u>	Text Sections or Pages
1	1	Introduction to Statistics	1.1
2	1, 2	and Graphical Descriptions of Data	1.3 and pp. 48-58, 64-66
3	3	Numerical Descriptions of Data	pp. 104-117, 121-122
4	3, 4	and Probability	pp. 124-139 and 4.1
5	4	Probability and Probability Distribution	4.2, 4.3
6	5	Probability Distribution	pp. 202-206 and 5.2
7	5	Probability Distribution	5.3
8		tba	
9		Exam 1	
10	6	Continuous Random Variables	6.1-6.3
11	6	Continuous Random Variables	6.3–6.4
12	6	Continuous Random Variables	6.4-6.5
13	7	Samples and Sampling Distributions	7.1- 7.2
14	8	Confidence Intervals and Sample Size	8.1-8.3
15	9	Confidence Intervals for Two Samples	9.1-9.2
16	9	Confidence Intervals for Two Samples	9.2-9.3
17		tba	
18		Exam 2	
19	10	Hypothesis Testing	10.1-10.3
20	10	Hypothesis Testing	10.3-10.5
21	10,11	and Hypothesis Testing (2 or more pop.)	10.6, 11.1
22	11	Hypothesis Testing (2 or more populations)	11.2-11.3
23	11	Hypothesis Testing (2 or more populations)	11.6

24	12	Examining Relationships	12.1
25	12	Examining Relationships	12.1
26		tba	
27		Exam 3	
28		Review for comprehensive final	

^{*}The instructor reserves the right to adjust the schedule as needed.

Testing: All tests and assignments are to be taken in pencil. A student may be given a grade of zero on a test or assignment done in ink. Students are not allowed to use their own scratch paper on tests. A student may use his/her own calculator. Students are not allowed to share a calculator during a test. Students must place headgear under their desks during testing. Don't forget a picture ID for testing. Any student may question the score he/she receives on any test within two days of the scores being returned to the class. After this time the score will remain as recorded.

Make-up Policy: Missed tests and missed quizzes will be recorded as a score of zero. If the student has presented a typed, excused absence, the instructor will give a make-up after the drop date. Quizzes cannot be made up. Some quizzes may be dropped. Students are expected to submit excuses for all class absences as soon as possible (in accordance with the current ULM catalog), preferably by the next class meeting. Anyone with a university excuse should notify the instructor prior to missing class.

Excuse: The typed excuse to be turned in must include:

- 1. Full name and CWID# 2. Course and section# 3. Date(s) of absence
- 4. Reason for absence 5. Signature 6. Attached copy of the documentation

MISCELLANEOUS

- 1. **Academic Integrity:** Students must observe the ULM published policy on Academic Dishonesty (see Page 4 in ULM *Student Policy Manual* -- http://www.ulm.edu/studentpolicy/).
- 2. **Course Evaluation Policy:** At a minimum, students are expected to complete on-line course evaluation.
- 3. **Student Services:** Information about ULM student services, such as Student Success Center (http://www.ulm.edu/cass/), Counseling Center (http://www.ulm.edu/counselingcenter/), Special Needs (http://www.ulm.edu/counselingcenter/special.htm), and Student Health Services, is available at the following Student Services web site http://www.ulm.edu/studentaffairs/.
- 4. Emergency Procedures: Exit calmly and assemble as a class outside the nearest exit.